

**PATENT**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**  
**(Case No. 98,189-P1)**

|   |   |                             |
|---|---|-----------------------------|
| <b>In the Application of:</b>             | ) |                             |
|   | ) | <b>Examiner: Unassigned</b> |
| <b>Richards, et al.</b>                   | ) |                             |
|   | ) |                             |
| <b>Serial No.: Unassigned</b>             | ) | <b>Group Art Unit: 1743</b> |
|   | ) |                             |
| <b>Filing Date: June 23, 2003</b>         | ) |                             |
|   | ) |                             |
| <b>For: Automated Molecular Pathology</b> | ) |                             |
| <b>Apparatus Having Independent</b>       | ) |                             |
| <b>Slide Heaters</b>                      | ) |                             |

**PRELIMINARY AMENDMENT**

**Mail Stop Patent Application**  
**Commissioner for Patents**  
**P.O. Box 1450**  
**Alexandria, VA 22313-1450**

Sir:

Please amend the claim of the above-captioned patent application as follows before calculating the application filing fee.

**IN THE SPECIFICATION:**

Cancel the first paragraph of the application after the heading "Cross-Reference Application and replace with the following paragraph:

This is a continuation of co-pending U.S. patent application serial no. 09/690,296, filed on October 17, 2000, which is a continuation-in-part application of U.S. patent application serial no. 09/259,240, filed February 26, 1999, now U.S. Patent No. 6,296,809, which claim priority to U.S. application serial no. 60/076,198 filed on February 27, 1998, the specifications of each of which are incorporated herein by reference.

**CLAIM STATUS:**

Please cancel claim 1 without prejudice.

1. (Cancelled)
2. (Currently amended) In an apparatus for analyzing biological materials comprising a plurality of heating devices supported by a heating device support, each heating device adapted to receive a slide and including a heater and a sensor, and control electronics in communication with the heating devices for receiving data from the sensors of the heating devices and for individually controlling the heaters of each of the heating devices, [A] a method for amplifying a target molecule within tissue samples mounted on slides received by the heating devices [for a biological apparatus of claim 1] comprising the steps of:
  - denaturing target molecules in the tissue sample by independently controlling the temperature of the heaters;
  - annealing at least ~~two~~one oligonucleotide primers to the target molecules by independently controlling the temperature of the heaters;
  - performing polymerase-mediated extension on the annealed oligonucleotide primer-target molecules by independently controlling the temperature of the heaters; and
  - repeating the steps of denaturing, annealing and performing polymerase-mediated extension at least one time.
3. (Original) The method of claim 2 wherein the step of repeating is performed a predetermined number of times.
4. (Original) The method of claim 2 wherein the step of denaturing includes controlling the heaters so that the temperature is at least 94°C.
5. (Original) The method of claim 2 wherein the step of annealing includes controlling the heaters so that the temperature is between 37°C and 65°C.

6. (Original) The method of claim 2 wherein the step of annealing includes controlling the heaters so that the temperature is approximately 50°C.

7. (Original) The method of claim 2 wherein the step of performing polymerase-mediated extension includes controlling the heaters so that the temperature is between 65°C and 75°C.

8. (Original) The method of claim 2 wherein the step of performing polymerase-mediated extension includes controlling the heaters so that the temperature is approximately 70°C.